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109: 235933q **Prevention of alkali-aggregate reaction using burnt montmorillonite.** Shibuya, Takemi (Kajima Corp.) **Jpn. Kokai Tokkyo Koho JP 63,117,939 [88,117,939]** (Cl. C04B22/08), 21 May 1988, Appl. 86/263,502, 05 Nov 1986; 5 pp. A sufficient amt. of burnt montmorillonite is blended in mortar or concrete to prevent the alkali–aggregate reaction. A mortar prepd. from portland cement 1, andesite aggregates (0.15–5.0 mm) 1, std. sand 1, and water 0.5 part with addn. of 5 wt.% (based on cement) montmorillonite burnt at 1200° for 1 h, and NaOH to give a total of 2.5 wt.% (based on cement) Na_2O content in the mortar was molded to form a specimen (4 × 4 × 16 cm), cured at 20° (100% humidity) for 24 h, demolded, and cured in water at 20° for 24 h. The specimen was cured further in steam at 40° for 6 mo, after which the longitudinal expansion was 0.033%, vs. 0.106% without burnt montmorillonite.